

REMARKS

In the non-final Office Action, the Examiner rejects claim 7 under 35 U.S.C. § 112, second paragraph, as failing to particularly point out and specifically claim the invention; rejects claims 1-6, 8-11, 14, 15, and 17 under 35 U.S.C. § 102(e) as anticipated by HENDEL et al. (U.S. Patent No. 6,591,303); rejects claims 7, 13, and 16 under 35 U.S.C. § 103(a) as unpatentable over HENDEL et al. in view of FRIEDMAN et al. (U.S. Patent No. 5,949,788); and rejects claims 12 and 18 under 35 U.S.C. § 103(a) as unpatentable over HENDEL et al. in view of ANNAAMALAI et al. (U.S. Patent No. 6,445,715). Applicant respectfully traverses these rejections.

By way of this amendment, Applicant amends claims 1, 7, and 8 to improve form. Claims 1-18 remain pending.

Claim 7 stands rejected under 35 U.S.C. § 112, second paragraph, as allegedly failing to particularly point out and distinctly claim the invention. More specifically, the Examiner alleges that "the ports" in line 3 of claim 7 lacks proper antecedent basis (Office Action, pg. 2). Applicant amends claim 7 herewith to change the dependency of claim 7 from claim 1 to claim 6. Applicant submits that the above feature of claim 7 now has proper antecedent basis.

For at least the foregoing reasons, Applicant respectfully requests that the rejection of claim 7 under 35 U.S.C. § 112, second paragraph, be reconsidered and withdrawn.

Claims 1-6, 8-11, 14, 15, and 17 stand rejected under 35 U.S.C. § 102(e) as allegedly anticipated by HENDEL et al. Applicants respectfully traverse.

A proper rejection under 35 U.S.C. § 102 requires that the reference teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present. See M.P.E.P. § 2131. HENDEL et al. does not teach features recited in Applicant's claims 1-6, 8-11, 14, 15, and 17.

For example, independent claim 1 recites a method for establishing a trunk between first and second network devices. The method includes monitoring, via the first network device, at least one of a source address or destination address in packets destined for or received from the second network device; determining, based on the monitoring, whether a communication pattern exists; and automatically establishing the trunk between the first network device and second network device when the communication pattern is determined to exist. HENDEL et al. does not disclose or suggest this combination of features.

For example, HENDEL et al. does not disclose or suggest determining, based on monitoring at least one of a source address or destination address in packets destined for or received from the second network device, whether a communication pattern exists. The Examiner relies on col. 6, line 66, to col. 7, line 5, of HENDEL et al. for allegedly disclosing this feature (Office Action, pg. 3). Applicant disagrees with the Examiner's interpretation of these sections of HENDEL et al.

At col. 6, line 66, to col. 7, line 5, HENDEL et al. discloses:

As an improvement, it is possible to have a dynamic mapping function and still maintain frame ordering, given that the function changes are slower than the output queue transit times. For instance, the mapping for a given source address can be determined at the time the first packet with the source address is seen, and eventually aged when the source address is not

seen for a period of time.

This section of HENDEL et al. discloses that the mapping of packets to output interfaces may be dynamic. This section of HENDEL et al. is in no way related to determining whether a communication pattern exists, as required by claim 1.

Further with respect to this section of HENDEL et al., the Examiner alleges that HENDEL et al.'s disclosure that mapping for a source address can be performed the first time a packet is seen is equivalent to determining whether a communication pattern exists (Office Action, pg. 3). Applicant disagrees.

One skilled in the art would readily appreciate that one cannot determine whether a pattern exists based on a single occurrence of an event (e.g., the receipt of a first packet with a particular source address). If the Examiner maintains this position, Applicant requests that the Examiner logically explain how a pattern can be determined at a time that the first packet with a particular source address is seen.

Since HENDEL et al. does not disclose determining, based on the monitoring, whether a communication pattern exists, HENDEL et al. cannot disclose automatically establishing a trunk between the first network device and second network device when the communication pattern is determined to exist, as also required by claim 1. The Examiner relies on Fig. 6b, col. 6, lines 21-29, and col. 6, line 60, to col. 7, line 5, of HENDEL et al. for allegedly disclosing this feature of claim 1 (Office Action, pg. 3). Applicant submits that these sections of HENDEL et al. do not disclose or suggest automatically establishing a trunk between the first network device and second network device when the communication pattern is determined to exist.

Fig. 6b of HENDEL et al. depicts a server 610 connected to a switch 620 via trunked segments 631-633. This figure of HENDEL et al. in no way discloses or suggests automatically establishing a trunk between the first network device and second network device when the communication pattern is determined to exist, as required by claim 1.

At col. 6, lines 21-29, HENDEL et al. discloses:

In order to maximize the throughput rate of data transmitted on the trunk 630, the first device 610 and the second device 620 select one of the interfaces 631-633 in the trunk 630 and uses the selected interface to transmit data. Load balancing in end-nodes typically involves utilizing state information regarding previously sent data, and the status of output queues corresponding to the plurality of interfaces 631-633 in selecting an interface to transmit present data.

This section of HENDEL et al. merely discloses the selection of an interface via which to transmit data over a trunk 630. This section of HENDEL et al. in no way discloses or suggests automatically establishing a trunk between the first network device and the second network device when the communication pattern is determined to exist, as required by claim 1.

Col. 6, line 60, to col. 7, line 5, of HENDEL et al. is reproduced above. This section of HENDEL et al. discloses that the mapping of packets to output interfaces may be dynamic. This section of HENDEL et al. in no way discloses or suggests automatically establishing a trunk between the first network device and second network device when the communication pattern is determined to exist, as required by claim 1.

Further with respect to this feature of claim 1, the Examiner alleges that "dynamically mapping or selecting based on determined source address to one of the trunk 630 having two more interfaces" is equivalent to automatically establishing a trunk

between the first network device and second network device when the communication pattern is determined to exist. Applicant disagrees.

One skilled in the art would readily appreciate that selection of an interface via which to transmit data over a trunk is in no way equivalent to automatically establishing a trunk between two devices. Moreover, dynamically mapping a packet to an interface is in no way equivalent to automatically establishing a trunk between two devices. The disclosure of HENDEL et al. does not support the Examiner's allegation. If the Examiner maintains this position, Applicant requests that the Examiner logically explain how selecting an interface or dynamically mapping a packet to an interface is equivalent to automatically establishing a trunk between the first network device and the second network device when the communication pattern is determined to exist.

For at least the foregoing reasons, Applicant respectfully submits that claim 1 is not anticipated by HENDEL et al.

Claims 2-6 depend from claim 1. Therefore, these claims are not anticipated by HENDEL et al. for at least the reasons given above with respect to claim 1.

Independent claims 8 and 14 recite features similar to features recited above with respect to claim 1. Therefore, these claims are not anticipated by HENDEL et al. for reasons similar to reasons given above with respect to claim 1.

Claims 9-11 depend from claim 8. Therefore, these claims are not anticipated by HENDEL et al. for at least the reasons given above with respect to claim 8.

Claims 15 and 17 depend from claim 14. Therefore, these claims are not anticipated by HENDEL et al. for at least the reasons given above with respect to claim 14.

Claims 7, 13, and 16 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over HENDEL et al. in view of FRIEDMAN et al. Applicant respectfully traverses.

Claim 7 depends from claim 1. The disclosure of FRIEDMAN et al. does not remedy the deficiencies in the disclosure of HENDEL et al. set forth above with respect to claim 1. Therefore, claim 7 is patentable over HENDEL et al. and FRIEDMAN et al., whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 1. Moreover, claim 7 recites an additional feature not disclosed or suggested by HENDEL et al. and FRIEDMAN et al.

Claim 7 recites deactivating the trunk when the communication pattern is determined to no longer exist and reassigning the ports to new trunks if a new pattern is determined. The Examiner admits that HENDEL et al. does not disclose this feature and relies on col. 10, lines 39-47, of FRIEDMAN et al. for allegedly disclosing this feature (Office Action, pg. 8). Applicant submits that this section of FRIEDMAN et al. does not disclose or suggest the feature of claim 7.

At col. 10, lines 39-47, FRIEDMAN et al. discloses:

Periodically, in accordance with the TCMP herein disclosed, reselection processing is performed to determine whether any links should be activated or deactivated; i.e. added to or removed from participation in the trunk. In the preferred embodiment, reselection processing occurs approximately every ten (10) seconds upon expiration of a reselection

processing timer although it should be appreciated that it may be desirable to employ other periods for reselection processing in a network.

This section of FRIEDMAN et al. discloses that a reselection process may be performed to determine if links within a trunk should be activated or deactivated. This section of FRIEDMAN et al. discloses deactivating links in a trunk and not deactivating a trunk.

Moreover, even assuming, for the sake of argument, that one skilled in the art could reasonably construe deactivating links within a trunk to be equivalent to deactivating a trunk, this section of FRIEDMAN et al. in no way discloses or suggests that the deactivating of links within a trunk is performed when a communication pattern is determined to no longer exist.

Further with respect to this feature, the Examiner alleges that "Hendel teaches creating parallel trunking of interfaces to increase transfer bandwidth between network devices, wherein the number of interfaces that are implemented may be any number greater than two depending on the bandwidth requirement. Hence, one having ordinary skill in the art would have readily recognized by creating new trunks depending on the bandwidth requirement Hendel's system deactivates the trunk when the communication pattern is determined to no longer exist and reassigning the ports to new trunks if a new pattern is determined" (Office Action, pg. 8). Applicant disagrees.

Applicant notes that the Examiner admits that HENDEL et al. does not disclose deactivating the trunk when the communication pattern is determined to no longer exist and reassigning the ports to new trunks if a new pattern is determined (see Office Action, pg. 8). Therefore, it is unclear how the Examiner can, on the one hand, admit that the

above feature is not disclosed by HENDEL et al. and, on the other hand, allege that HENDEL et al. discloses the very feature that the Examiner admits that HENDEL et al. does not disclose. Applicant submits that neither HENDEL et al. nor FRIEDMAN et al. discloses or suggests deactivating the trunk when the communication pattern is determined to no longer exist and reassigning the ports to new trunks if a new pattern is determined, as required by claim 7.

For at least these additional reasons, Applicant submits that claim 7 is patentable over HENDEL et al. and FRIEDMAN et al., whether taken alone or in any reasonable combination.

Claim 13 depends from claim 8. The disclosure of FRIEDMAN et al. does not remedy the deficiencies in the disclosure of HENDEL et al. set forth above with respect to claim 8. Therefore, claim 13 is patentable over HENDEL et al. and FRIEDMAN et al., whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 8. Moreover, claim 13 recites a feature similar to the feature recited above with respect to claim 7. Therefore, Applicant submits that claim 13 is patentable over HENDEL et al. and FRIEDMAN et al., whether taken alone or in any reasonable combination, for reasons similar to reasons given above with respect to claim 7.

Claim 16 depends from claim 14. The disclosure of FRIEDMAN et al. does not remedy the deficiencies in the disclosure of HENDEL et al. set forth above with respect to claim 14. Therefore, claim 16 is patentable over HENDEL et al. and FRIEDMAN et al., whether taken alone or in any reasonable combination, for at least the reasons given

above with respect to claim 14. Moreover, claim 16 recites a feature similar to the feature recited above with respect to claim 7. Therefore, Applicant submits that claim 16 is patentable over HENDEL et al. and FRIEDMAN et al., whether taken alone or in any reasonable combination, for reasons similar to reasons given above with respect to claim 7.

Claims 12 and 18 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over HENDEL et al. in view of ANNAAMALAI et al. Applicant respectfully traverses.

Claim 12 depends from claim 8. The disclosure of ANNAAMALAI et al. does not remedy the deficiencies in the disclosure of HENDEL et al. set forth above with respect to claim 8. Therefore, claim 12 is patentable over HENDEL et al. and ANNAAMALAI et al., whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 8.

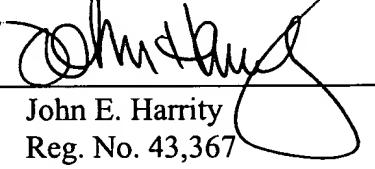
Claim 18 depends from claim 14. The disclosure of ANNAAMALAI et al. does not remedy the deficiencies in the disclosure of HENDEL et al. set forth above with respect to claim 14. Therefore, claim 18 is patentable over HENDEL et al. and ANNAAMALAI et al., whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 14.

In view of the foregoing amendments and remarks, Applicant respectfully requests the Examiner's reconsideration of this application, and the timely allowance of the pending claims.

PATENT
U.S. Patent Application Serial No. 09/768,293
Attorney Docket No. F0682

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1070 and please credit any excess fees to such deposit account.

HARRITY & SNYDER, LLP

By: 

John E. Harrity
Reg. No. 43,367

Date: July 9, 2004

11240 Waples Mill Road
Suite 300
Fairfax, Virginia 22030
(571) 432-0800